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ABSTRACT

Ninety-six subjects were randomly chosen from 386 bank customers who responded to a questionnaire using subjective variables to segment or label respondents. A review of subjective segmentation studies revealed that the studies can be divided into three approaches--benefit segmentation, attitude segmentation, and life style segmentation. Choosing attitude segmentation to determine bank customers' subjective opinions about automated teller machines (ATMs), some 75% were labeled "Hurried Depositors" because of a concern with getting in and out of the bank in a hurry, and were chosen to represent the priority market target in selecting a name for the ATM system to be introduced by their bank. Based on the preferences of the Hurried Depositors, the following criteria were established to select a specific name: the name should communicate a major benefit relevant to the primary market, it should suggest ATM services, and it should have human rather than institutional connotations. The criteria used in making the final decision did not come from the data but from assumptions about communication and human behavior: that the symbol chosen should convey benefits relevant and important to the target, with no excess connotations, particularly those which might be negative. (Sample statements from the questionnaire are included.) (AEA)

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THE USE OF ATTITUDE SEGMENTATION IN SELECTING MARKET TARGETS AND CHOOSING A NEW PRODUCT NAME: APPLICATION TO AN AUTOMATED TELLER SYSTEM

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THE USE OF ATTITUDE SEGMENTATION IN SELECTING MARKET TARGETS AND CHOOSING A NEW PRODUCT NAME: APPLICATION TO AN AUTOMATED TELLER SYSTEM

Advertising and marketing literature has dealt exhaustively with the subject of market segmentation. All kinds of variables and combinations of variables have been used to segment markets and every imaginable technique has been presented as a means of segmenting markets. Yet directions taken in market segmentation are by no means homogeneous. In a recent article, Percy (1976) argued that a systematic procedure in market segmentation had not yet been carefully delineated. He presented a general paradigm for such systematic procedures, basing the initial segmentation on attitudes and proposing additional analyses to incorporate demographic and perceptual data and behavioral information about product class, brand, and media use into the development of marketing and advertising strategies and media plans.

The paper indicates how far marketers have come in building decision systems based on approaches to segmentation that give subjective variables the status of independent variables, in preference to the prevalent practices of segmenting with demographic and socioeconomic variables (Munn, 1960; Harp, 1961; Ferber, 1962; Frank, Massey and Boyd, 1967) and with overt behaviors (Twedt, 1964). The argument favoring subjective independent variables is based in the theoretical assumption that persons consume to satisfy needs and wants, an idea Adam Smith introduced in economic theory as "value in use" in 1776. Say described the concept in 1821 as "utility," and Alderson used the same concept in 1957 to justify defining products as "bundles of utilities." Haley (1968) used the concept in saying that segmentation should be based on subjective variables, which he argued are causal, whereas demographic and behavioral variables are descriptive but not causal.

However compelling the argument for using subjective variables to segment markets, the history of their application has been one of equivocal success, especially the early attempts to link traits to market behavior which were clearly failures, however instructive (Tucker and Painter, 1961; Frank, 1967; Greeno, Sommers, and Kernan, 1973; Westfall, 1962). Mixing demographics with personality traits did not appear to help (Massey, Frank and Lodahl, 1968; Myers, 1967; Koponen, 1960).

While more recent work has been successful, there exists no consistent use of terminology nor a prevalent choice of units of analysis nor a decidedly preferable methodology. In reporting subjective segmentation studies, the literature frequently produces the terms "psychographics," "life style," "attitudes," and "benefits." However, none of those terms has gained unequivocal definition. In particular, the terms "life styles" and "psychographics" have been ambiguous. One finds some writers using the terms interchangeably (Wells, 1973). Some regard "life styles" as a subclass of "psychographics" (Ziff, 1972). In examining two dozen papers on "life styles" and "psychographics," Wells (1973) found no less than 32 different definitions for the terms. Commonly psychographic segmentation studies have used psychographic variables as dependent rather than independent variables; Plummer (1974), for example, operationalized "life styles" by segmenting on product usage level, then looking for differences across segments for activity, interests, and opinion items.

The use of subjective variables in segmentation research can be divided into three different approaches which appear promising. They differ primarily in the specificity or generality of the content to which the subjective units of analysis refer.

The first of these is benefit segmentation (Haley, 1968), an approach which segments on the basis of items that represent benefits and deficits

directly associated with a product class. Benefit segmentation appears to have general promise, but selection of benefit and deficit items associated closely with the product may make it less sensitive in situations in which important reasons for brand choice are self expressive or social or otherwise not closely associated with the product by consumers. Use of operants as benefit and deficit items obviates this criticism to some extent, but one must question the consumer's ability to produce relevant operants when a product class is new or a specific entry is new.

Attitude segmentation differs from benefit segmentation in that attitude items are usually selected to include associations about the total environment in which a product class is used. It would include product-related items, but also associations extending into related activities -- conditions under which the product is suggested, product preparation, service expectations, and the like. Stephenson (1963) has argued in favor of this approach to segmentation, as Percy (1976) has more recently done.

Life style segmentation deemphasizes the use of units that are direct associations with a product class. The content of a life style study refers not to a product class but to activities, interests and opinions that characterize one's life (Plummer, 1974). Such studies appear to be of strategic value when products are used primarily for self expressive or social motives, as a basis of differentiating a product in a category of look-alike products, or when purchases depend heavily on the relationship between seller and consumer.

Attitude Segmentation and Automated Teller Machines

The present study used attitude segmentation to determine the subjective positions of customers of a banking organization about automated teller machines (ATMs). ATM's are second generation machines that grew out of cash dispensing machines, introduced in 1969. As the name implies, cash dispensing machines performed only one function and were limited almost exclusively to through the

wall, on-premise installations.

In 1972, the first ATM's were introduced, with as many as ten additional functions, including deposits to and transfers between savings and checking accounts, cash advances from bank credit cards, loan and utilities payments and account balance reports. The latter requires ATM's to be on line with the host computer. These functions account for fully 90% of all transactions conducted at teller or drive-in windows.

As financial institutions became increasingly interested in ATM's, a number of new equipment manufacturers got into the act. Such firms as IBM, Doc-U-Tel, Diebold, Mosler, NCR and Burroughs developed their own unique systems, each with different bells and whistles, options and configurations. As of December, 1976, more than 4,600 ATM's were reported in operation in the United States and growing in excess of 100 units a month.

Consumer acceptance of ATM's has typically been slow. Consumers are asked to make what seems to be a radical departure from their accustomed way of banking, and few leap at the opportunity to change. Consumer education is critical to the success of ATM introductions. For that reason, present customers are the focus of initial marketing efforts. And for that reason, the study reported here was restricted to present customers. Attitude segmentation was chosen to segment customers on the basis of present attitudes about ATM's -- the basis for sharper market targeting and for a number of strategic promotional decisions. This report restricts itself to the market target decision and to an initial promotional decision, selecting a name for the ATM system.

Methodology

Individual focus interviews were done with 25 randomly chosen Lansing adults. Each interview included a discussion of banking and focused on the concept of automated teller machines. Thirty opinions broadly representative of comments about ATM's and logically related banking matters were taken from

the interviews and included in a mail questionnaire mailed to 700 bank customers by randomly choosing a starting point and selecting every nth name. Some 386 customers returned the questionnaire, which included demographics and behavioral questions in addition to the attitude items. Subjects responded to each attitude item by checking a five-point scale with "strongly agree" and "strongly disagree" anchors. A number of analyses were done with the aggregate data.

A subset of 96 subjects were randomly chosen for the attitude segmentation analysis. The QUANAL program developed at University of Iowa by N. Van Tubergen was used to perform Q factor analysis on the attitude data. Data for the 96 subjects were intercorrelated to produce a correlation matrix, which was factored by the principal axes method and subjected to varimax rotation to obtain a maximum number of "pure" loadings (significant loadings on one and only one factor). The analysis provided evidence for two factors, representing two groups of subjects who have given fundamentally different responses to the attitude items. The two groups comprised 86% of the subjects in the analysis. The first factor, by far the largest, included 75% of subjects. The second factor included an additional 11% of subjects. Interpretation of the attitude for each group was based on statement arrays constructed from the responses of individuals, weighted according to their factor loadings.

Interpretation

The interpretation of each factor depended on the statement array for each factor, with particular attention to statements that strongly discriminated the two groups.

Ten statements emerged as consensus statements[1] (Table 1). The predominant importance of bank location was affirmed (Statement 11). Subjects indicated

[1]A consensus statement, a statement which factors are essentially in agreement about, is operationally defined as a statement, the standard scores for which differ by less than 1.0 standard score across the factors.

little concern with the complexity of financial matters (Statement 24). Of particular importance, there appeared an acceptance, but an unenthusiastic one, of ATM's, and an associated feeling that banks are not strongly interested in their welfare as customers (Statements 18, 4, 28).

Table 1.--Consensus Statements. The statement number and statement appear at left. The factors are indicated FI and FII. The scores are standard scores from the individual factor arrays.

	Statement	FI	FII
11.	Convenience means more than just having your bank close by where you work or live. It means getting in and out of the bank as quickly as possible with no hassle.	-1.6	-1.4
24.	Financial things are complicated enough - I want my banking to be as simple and easy as possible.	-1.5	-0.8
18.	The tellers may as well be automatic and run by computers...no one makes any special effort to look after my account anyway.	+1.3	+0.7
4.	Banks aren't really interested in providing good service...they're simply interested in making money.	+1.4	+1.0
28.	Banks don't really care about the average customers...the real advantages and services are given to the big accounts...the people with the most money.	+1.2	+0.4

Factor I: Hurried Depositors

Some 75% of subjects emerged on Factor I, labeled "Hurried Depositors" because of an apparent predominant concern with getting in and out of the bank in a hurry. Factor I subjects felt banking takes too much time (Statement 12) (Table 2) and enjoy banking most when they are the only customer in the bank (Statement 26), apparently because under those conditions there would be no lines to slow their transactions. They predominantly view banks as little more than a

place to do routine banking (Statement 1), being little concerned with how friendly tellers are (Statement 9), with people in the bank to meet and talk to (Statement 9), with the availability of counseling (Statement 1).

Table 2.--Discriminating Statements, Factor I. The statement number and statement appear at left. Factor I is indicated as FI, and the standard score given. The average standard scores for other factors is given as AVG. Z. The third column, DIFF., gives the difference between the FI standard score and the averaged standard scores. The direction of difference is indicated by + or -.

	Statement	FI	AVG. Z	DIFF.
12.	Banking just takes too much time. I'd be just as happy if I never had to go to the bank.	+1.2	+0.5	+0.7
26.	I enjoy banking most when I'm the only customer in the bank.	+0.6	-0.4	+1.0
1.	Banks are more than places to deposit money. It's important to me to get some financial counseling as well.	-1.8	-0.5	-1.3
9.	Friendly tellers are really one of the most important things I look for at the bank.	-1.4	-0.2	-1.2
8.	There's no way to really run a good bank without people there for customers to meet and talk with.	-1.4	-0.7	-0.7

Factor II: Interpersonal Depositors

Only 11% of subjects emerged on Factor II, and if this had been the larger group it would have meant a much more difficult and perhaps impossible task to introduce ATM's. Factor II placed great importance on being able to make banking transactions on an interpersonal basis. They valued the "real and personal" experience of going into a bank (Statement 14) and friendly tellers (Statement 9). They showed a clear distaste for automated teller service (Statements 5, 16, 21), apparently motivated by a fear of loss of control over banking transactions

(Statements 10, 29) and a fear that ATM's might not be reliable (Statement 15).

Table 3.--Discriminating Statements, Factor II. The statement number and statement appear at left. Factor II is indicated as FII, and standard scores given. The averaged standard scores for other factors is given as AVG. Z. The third column, DIFF., gives the difference between the FII standard score and the averaged standard scores. The direction of difference is indicated by + or -.

	Statement	FI	AVG. Z	DIFF.
14.	Going into the bank is important...it makes the whole thing seem more real and personal. That's important to me.	+1.0	-0.7	+1.7
9.	Friendly tellers are really one of the most important things I look for at the bank.	+0.6	-1.2	+1.8
5.	Customer operated tellers at the bank would be just too modern for me.	+1.7	-0.6	+2.3
16.	Automatic tellers are another way to give the little guy lousy service. Banks only give personal service to the big money accounts.	+1.5	+0.1	+1.4
21.	Using an automatic teller might be kind of fun, working with all those gadgets.	-0.9	+1.0	-1.9
10.	Customer operated automatic tellers are just another way for the bank to have the last word so you can't speak your mind.	+1.6	-0.4	+2.0
29.	If the tellers were machines instead of people, I'd sure feel like I didn't have any say-so over my own banking business.	+1.1	-0.8	+1.9
15.	I wouldn't like to use an automatic teller because I couldn't depend on it to work all the time.	+1.3	-0.9	+2.2

Market Target Priorities

It appeared clear that Factor I, Hurried Depositors, represented the priority market target for two compelling reasons: first, the attitude

characteristic of that group was compatible with the use of ATM's. Banking for them represented a purely pragmatic routine activity, something to be gotten done as quickly and conveniently as possible, an activity that should interrupt and impinge on other activities as little as possible. The product to be sold could offer this group a clear advantage over their present way of getting their banking done by affording them an alternative choice, another "teller" when the bank is crowded and by allowing them to bank before or after banking hours when that allowed them not to reschedule their daily activities around a trip to the bank. Second, the Hurried Depositor attitude was that of a huge majority (75%) of the bank's present customers. Factor I had both tractability and size.

On the same criteria, Factor II appears much less viable. The Interpersonal Depositor attitude runs counter to the adoption of ATM's, and the small size of that group (11%) makes them much less attractive as a market target, even if their attitude were tractable.

Attitude Segmentation Data and Marketing Decisions

An argument frequently made in favor of various subjective approaches to segmentation is that the "richness" of subjective data is especially useful for strategic and tactical message decisions: selling propositions, positioning, tone, settings, casting decisions, and message structure. There are clearly implications in the data base and market target decision for such qualitative decisions. And it should be reminded that such implications are abductions and therefore, in a very thorough effort, should be independently validated.

This paper, however, restricts itself to describing a single decision made on the basis of the data, that of selecting a name for the ATM system to be introduced. And that name was made under a number of constraints: the name had to be justified to management; a design created, approved and incorporated into the product, and the legal groundwork laid to protect the name -- all in time to

meet a hard deadline for introducing the product.

What's In A Name?

The trade literature revealed that a number of different criteria had been used in selecting names for ATM's in other markets. The most common approach centered on the 24 hour access that consumers had to ATM units: Round the Clock Teller, 24 Hour Banker, Atlantic Bankaround, and Teller 24.

In some markets, banks had attempted to portray the service as a modern space-age convenience, using names that they felt bore "modern machine" connotations: Money-Matic, Push Button Bank, and Bank-O-Matic.

In other markets, banks chose an opposite strategy, trying to "humanize" the machine to ease fears they thought consumers associated with ATM's. That rationale led to giving some ATM's human names such as Tillie The Teller and Bernie-The Wonder Teller. The same rationale was used by a midwestern bank in referring to its ATM system as Fingertip Banking.

Some other names appeared to combine these strategies (Miss X, The Sleepless Teller) or to reflect a machine function (The Bread Box).

The bank had prepared for the name decision with the impending deadline in mind. Some 65 names had been generated, mostly internally. Some had been taken from trade literature with the assumption that legal permission might be gained for a name owned by a non-competing bank. The deadline allowed no separate verification of the name chosen.

The criteria used in selecting a specific name were these: The name chosen should communicate the major benefit of using ATM's or fit logically with benefit symbols so the marketer could give the name a richness of meaning relevant to the primary market, the Hurried Depositors. The name should, if possible, suggest ATM services. The name Bread Box, for example, conveyed only one function, cash withdrawals, of a machine that provided numerous other functions, while "edifice"

or "institutional" names like "bank" or "machine" were associated with too many functions, or with no functions at all.

Based on the data, it was decided that the name should have human connotations, for several reasons. First, while the primary market target did not require "friendly" service, their attitude did show some displeasure that banks, in general, did not care about giving personal services, indicating some interest in human concerns. Further, while the Factor II group was smaller and less tractable about ATM's, they were considered a secondary target. It was decided that emphasizing human characteristics of ATM's at least indicated the bank's concern with providing interpersonal service. In addition, such names allowed for developing a memorable service character.

Therefore, names with edifice or institutional connotations were eliminated from the list. Names with machine connotations were eliminated because they did not suggest ATM functions and because they would emphasize negative connotations, especially to the Factor II Interpersonal Depositors.

The label "teller", as part of the name, appeared to be a particularly useful choice. It had human connotations, and the functions ATM's provide comprise most of the functions that human tellers provide.

It was decided, then, that "teller" should be part of the name.

It was decided that names suggesting 24-hour access were good solutions but not the strongest choice, that the major benefits Hurried Depositors could receive from ATM's was not "24-hour access", but avoiding time-consuming crowds and avoiding disrupting other activities to do their banking. In short, 24 hour access represented support or evidence for benefits, but did not convey benefits. The reasoning was further supported later when copytesting showed that print headlines focusing on 24 hour access did not work as well as ads dramatizing problems that ATM's could prevent or solve. Further, in some executions, the

24-hour access concept seemed to detract from human connotations, as in Round the Clock Teller and in Teller 24, which suggested machine connotations.

The first name "ready" was chosen to go with "teller," producing the name ReadyTeller. Unlike the "24 hour access" concept, "ready" could more directly suggest benefits important to Hurried Depositors. When the Hurried Depositor encountered long lines of cars or people, ReadyTeller would be ready. The Hurried Depositor no longer had to leave work early (or bank at noon to avoid leaving work early) because ReadyTeller would be ready after work. On holidays, when all the banks were closed, ReadyTeller would be ready. The word "teller" gave it human connotations and suggested the multiple functions of ATM's. The entire name had no machine connotations and lent itself well to humanizing the service; to the name could be added a face, a character, behaviors, an attitude -- the techniques that help to make a product character memorable and attractive.

The Anatomy of a Decision

It seems worthwhile to note in the above example that the criteria for the decision did not come from the data but from assumptions about communication: that the symbol chosen should convey benefits relevant and important to the target market, with no excess connotations, particularly those which might be negative.

The role of the attitude data was to enable one to operationalize those criteria in regard to a specific market, that is, to teach the communicator what concepts to try to convey and what specific negative connotations to avoid.

Similarly, it might be noted that criteria for selecting a market segmentation method do not come from specific consumer data but from assumptions about human behavior: that persons behave to satisfy wants and needs and that attitudes form to help persons achieve wants and needs. Thus one finds attractive the paradigm offered by Percy not primarily for itself, but for its promise in bringing decision makers a step closer to bringing research assumptions in line with decision assumptions.

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